



## CERTIFICATE OF MAILING 37 C.F.R 1.8

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date below:

2/3/05

Kerry Morris

**PATENT** 

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Anthony F. Veneruso

Serial No.: 10/707,596

Filed: 12/23/03

For: Nanotube Electron Emission Thermal

**Energy Transfer Devices** 

Group Art Unit: 3672

Examiner:

Atty. Dkt. No.: 24.0843

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

In accordance with 37 C.F.R §§ 1.97(g),(h), this Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

The present Information Disclosure Statement is being filed prior to the receipt of a first Official Action reflecting an examination on the merits, and hence is believed to be timely filed in accordance with 37 C.F.R § 1.97(b). No fees are believed to be due in connection with the filing of this Information Disclosure Statement, however, should any fees under 37 C.F.R. §§ 1.16 to 1.21 be deemed necessary for any reason relating to these materials, the Assistant Commissioner is hereby authorized to deduct said fees from Deposit Account No. 19-0610.

Applicant respectfully requests that the listed documents be made of record in the present case.

Schlumberger Technology Corporation Sugar Land Product Center Intellectual Property Law & Contracts 200 Gillingham Lane Sugar Land, Texas 77478 (281) 285-4562 (281) 285-4232 (Fax)

Date: \_\_\_\_\_\_ 3-Feb-OS

Respectfully submitted,

Victor H. Segara Reg. No. 44,329

FORM PTO-1449 (Modified)				ATTY. DOCKET NO. 20.2914	SERIAL NO. 10/707,596			
	•	F INFORMATION PROVIDED BY APPLICANT						
Several sheets if necessary)				APPLICANT: Anthony F. Veneruso				
FEB C	9 2005		FILING DATE: 12/23/03	GROUP 3672				
REFERENCE	DESCNAT	ION U.S. PATENT DOCU	MENTS					
Examiner Initial		Document No.	Date		entee			
	AA	6,089,311	07/18/00	Edelson				
	AB	6,333,016	12/25/01	Resasco et al.				
	AC	6,440,761	08/27/02	Choi				
	AD	6,664,727	12/16/03	Nakamoto				
	AE	6,605,894	08/12/03	Choi et al.				
	AF	6,064,137	05/16/00	Cox				
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		Document No.	Date	Country	Translation Yes No			
	AG							
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	АН	Hishinuma, Y. et al., "Refrigeration by Combined Tunneling and Thermionic Emission in Vacuum: Use of Nanometer Scale Design," Applied Physics Letter 78(17); April 23, 2001; pp. 2572-2574.						
	AI	Shannon, Mark A. et al., "Integrated Mesoscopic Cooler Circuits (IMCCs)," 1999, Proceedings of ASME, Advanced Energy System Division, AES-Vol. 39, pp. 75-82.						
	AJ	Tavkhelidze, Avto et al., "Electron Tunneling Through Large Area Vacuum Gap – Preliminary Results," ICT2002 Conference Proceedings; pp. 1-4.						
	AK	Dean, Kenneth A. et al., "Carbon Nanotube Field Emission Electron Sources," New Diamond and Frontier Carbon Technology Vol. 12, No. 4, 2002, pp. 1.						
EXAMINER				DATE CONSIDERED				

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

1. The attached cited information should not be construed as an admission that any of the above items are prior art to the subject invention.

2. This is not a representation that a search has been made.

FORM: PTO-1449 (Modified)				ATTY. DOCKET NO. 20.2914	SERIAL NO. 10/707,596		
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(Use several sheets if necessary)				APPLICANT: Anthony F. Veneruso			
				FILING DATE: 12/23/03	GROUP 3672		
REFERENCE	DESIGNAT	ON U.S. PATENT DOCUM	IENTS				
Examiner Initial		Document No.	Date	Pat	entee		
	BA						
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	BE -	Kim, J.M. et al., "Full Color, Large Area Field Emission Displays Using Carbon Nanotube Emitters," EUROFE2000, Sept. 25-29, 2000, Segovia-Spain, pp. 1-2.					
	BF	Selby, John C. et al., "Fabrication of Mesoscopic, Flexible, High Pressure, Microchannel Heat Exchangers (MHEx)," Transactions of NAMRI/SME Vol. XXIX, 2001, pp. 469-476.					
	BG	Muroyama, Masakazu et al., "Fabrication of Carbon Nanotube Triode Using Helicon Plasma CVD with Electroplated NiCo Cataylyst," Mat. Res. Soc. Symp. Proc. Vol 772, 2003, pp. M.7.4.1 – M.7.4.6.					
	вн	Fisher, Timothy S., "Nanoscale Energy Conversion by Selective Electron Emission: A New Paradigm or Maxwell's Demon Revisited?" Energy and Nanotechnology: Strategy for the Future, Baker Institute, Rice University, May 4, 2003; Purdue University, School of Mechanical Engineering, and Brick Nanotechnology Center, pp. 1-18.					
EXAMINER	1	1	<u> </u>	DATE CONSIDERED	F 557		

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			APPLICANT: Anthony F. Veneruso				
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REFERENCE	DESIGNAT	ION U.S. PATENT DOCUM	MENTS				
Examiner Initial		Document No.	Date	Patentee			
	CA						
	СВ						
	cc						
FOR	EIGN PATE	NT DOCUMENTS					
		Document No.	Date	Country	Translation No.		
	CD	Document No.	Date	Country	Yes No		
OTHI PAGES, ET		I ATION PROVIDED (AUTHOR,	TITLE, DA	   FE,	 		
	CE	Wei, B.Q. et al., "Organized 2002, pp. 495-496.	ed Assembly	of Carbon Nanotubes," N	lature, Vol. 416, April 4,		
	CF	Moores, K.A. et al., "Performance Assessment of Thermoelectric Coolers for Use in High Temperature Electronics Applications," Proceedings of the 18 <sup>th</sup> IEEE International Conference on Thermoelectrics (1999), pp. 31-34.					
	CG	Lee, Ok-Joo et al., "Fabrication of Field Emitter Arrays of Carbon Nanotubes Aligned on Patterned Sustrates Using Self-Assembly Monolayer," Mat. Res. Soc. Symp. Proc. Vol. 772, pp. M7.7.1 – M7.7.6.					
	СН	Spangenburg, K.R. et al., "Fundamentals of Electron Devices," McGraw-Hill, 1957, pp. 137-147 and 156-171.					
	CI	Rupesinghe, N.L. et al., "Field Emission Vacuum Power Switch Using Vertically Aligned Carbon Nanotubes, J. Vac. Sci. Technol. B 21-2(1), Jan./Feb. 2003, pp. 338-343.					
EXAMINER	L			DATE CONSIDERED			

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